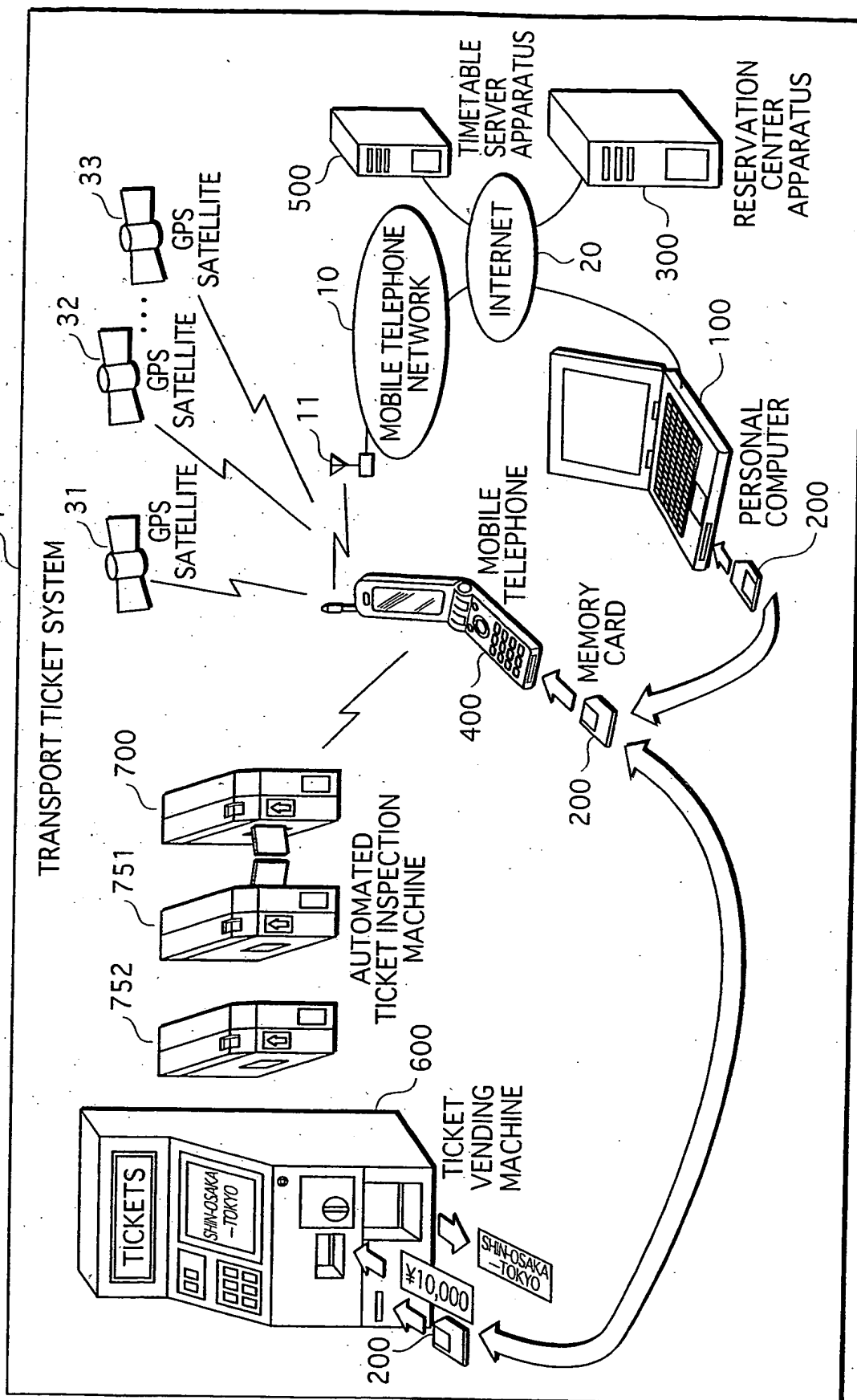


FIG. 1



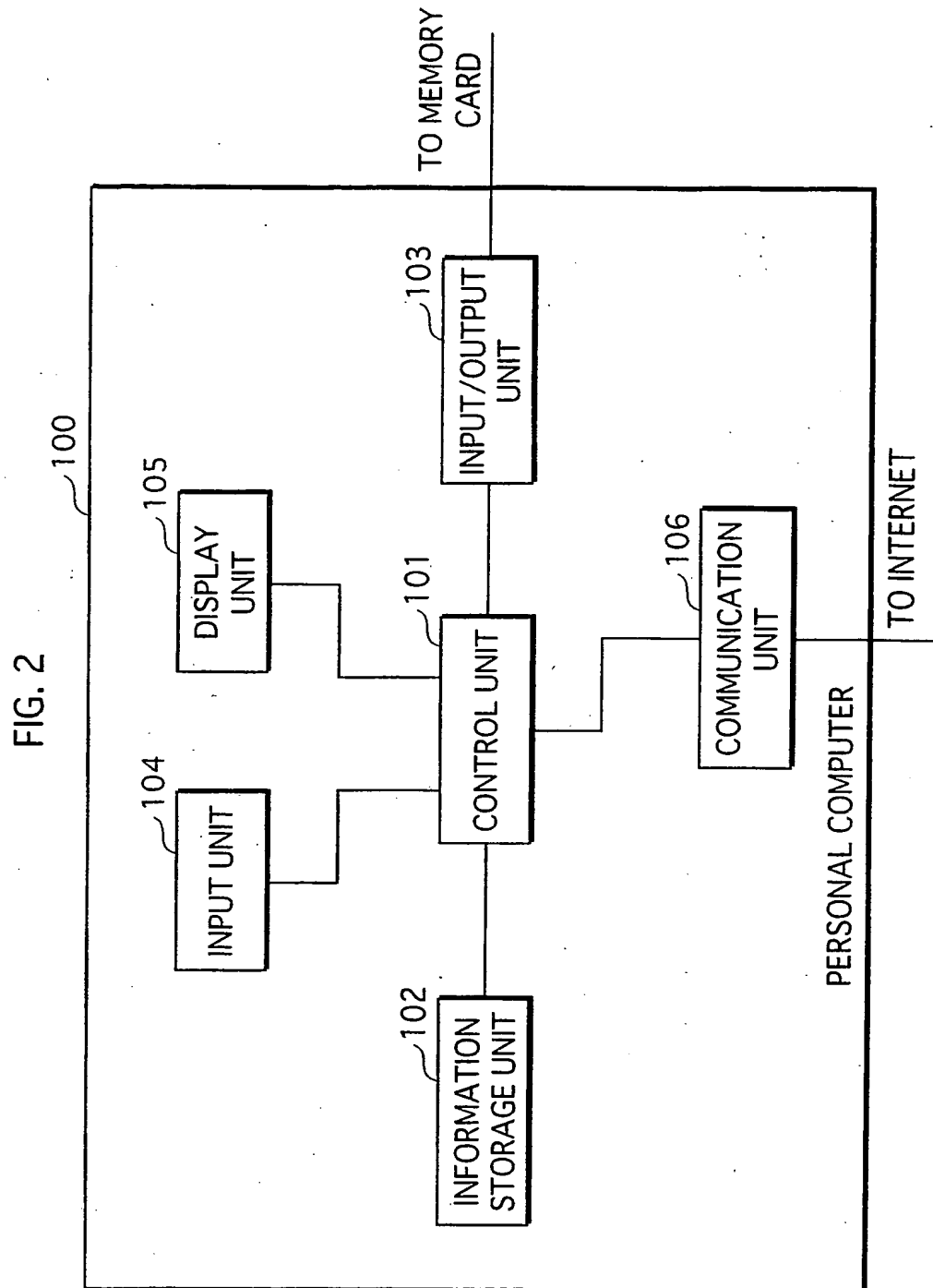


FIG.3

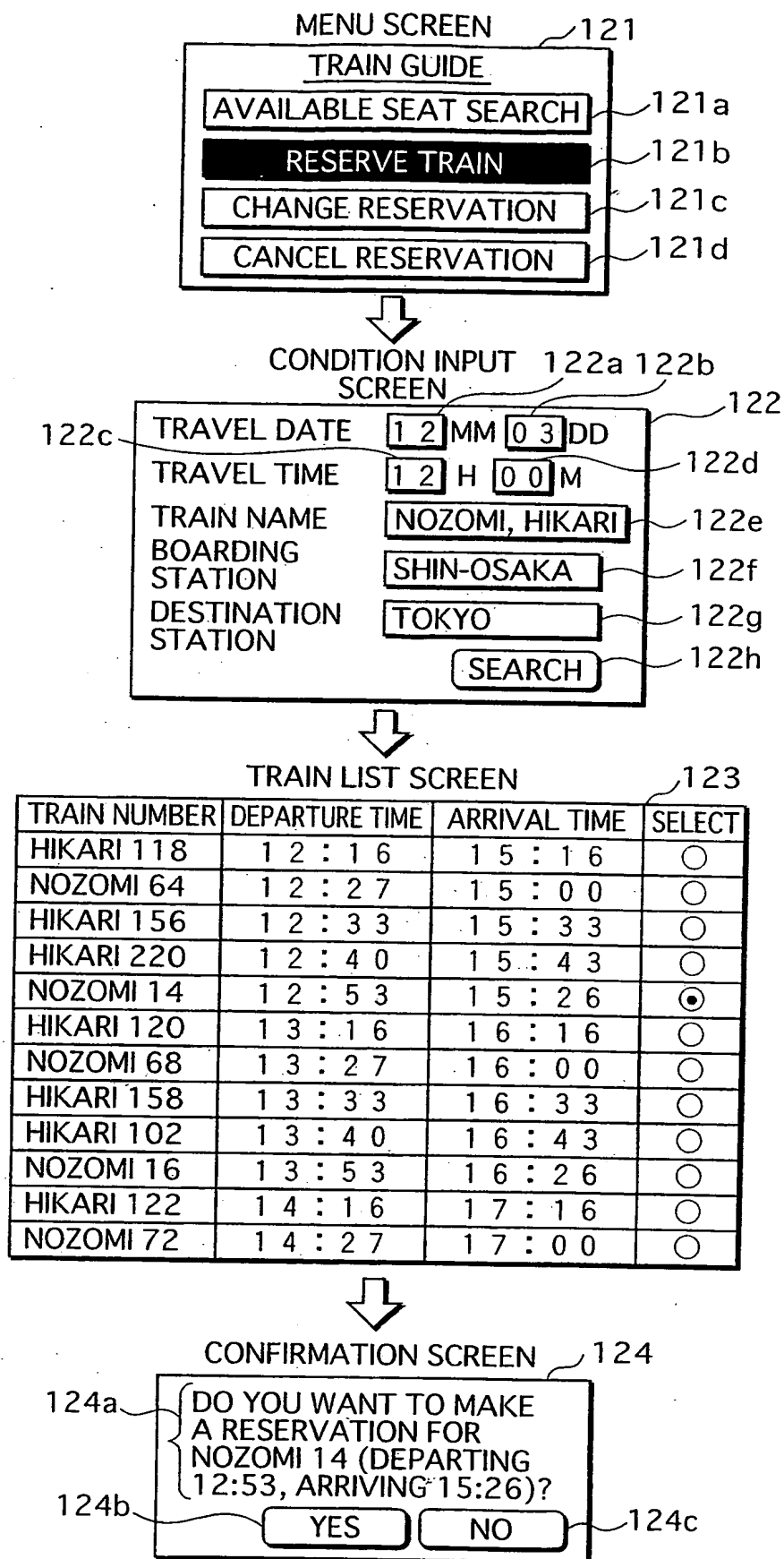


FIG. 4

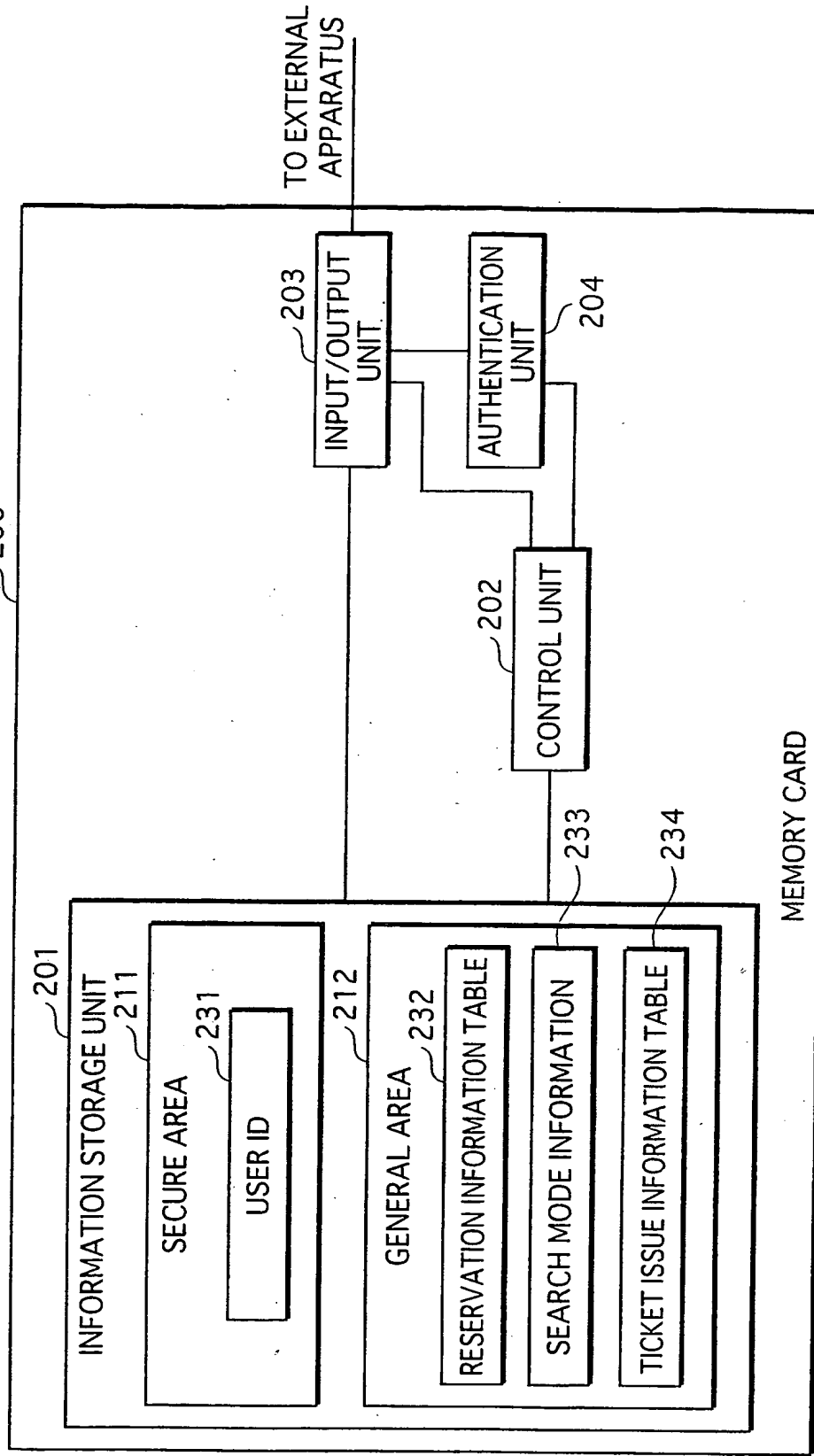


FIG. 5

RESERVATION INFORMATION TABLE

232

RESERVATION INFORMATION										RESERVATION SIGNATURE DATA	PROCESSING COMPLETION SEGMENT
RESER- VATION NO.	RESER- VATION DATE	TRAVEL DATE	TRAIN NO.	BOARD- ING STATION	DESTI- NATION STATION	DEPAR- TURE TIME	ARRIVAL TIME	SEAT NO.			
03256	20041115	20041203	NOZOMI 14	SHIN- OSAKA	TOKYO	12:53	15:26	06-08A	156fe32...	UNPRO- CESSED	
03257	20041115	20041204	NOZOMI 35	TOKYO	SHIN- OSAKA	17:45	19:45	05-12C	4ab5267...	UNPRO- CESSED	
.	

FIG. 6

234

TICKET ISSUE INFORMATION TABLE

TICKET ISSUE INFORMATION						
TICKET NO.	TRAVEL DATE	TRAIN NO.	BOARDING STATION	DESTINATION STATION	DEPARTURE TIME	ARRIVAL TIME
045279	20041203	NOZOMI 14	SHIN- OSAKA	TOKYO	12:53	15:26

TICKET ISSUE INFORMATION						TICKET ISSUE SIGNATURE DATA
FARE	EXPRESS SURCHARGE	SEAT NO.	PAYMENT METHOD	PROCESSING SEGMENT	ENTRY TIME	EXIT TIME
9,000	8,000	06-08A	CASH	UNPROCESSED	—	—
						abc129f

FIG. 7

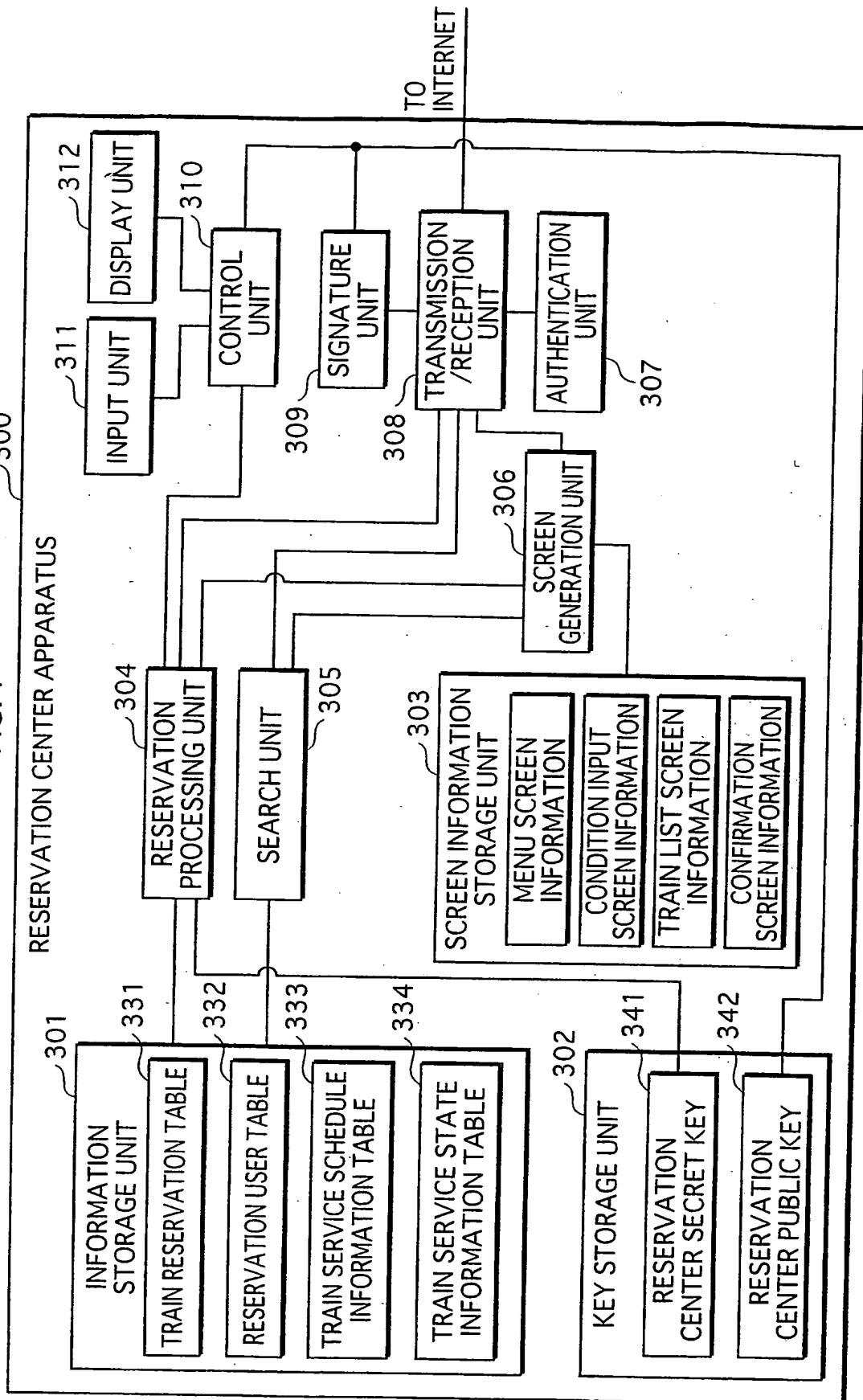


FIG. 8
TRAIN RESERVATION TABLE 331

TRAIN RESERVATION INFORMATION					
TRAVEL DATE	TRAIN NO.	SEAT RESERVATION INFORMATION			
		SEAT NO.	SECTION INFORMATION (SHIN-OSAKA-KYOTO)	SECTION INFORMATION (KYOTO-NAGOYA)	SECTION INFORMATION (NAGOYA-TOKYO)
20041203	NOZOMI 14	01-01A	03152	03152	03152
		01-01B	03153	03153	AVAILABLE
		⋮	⋮	⋮	⋮
		16-24E	AVAILABLE	AVAILABLE	AVAILABLE
20041203	NOZOMI 15	01-01A	03256	03458	AVAILABLE
		01-01B	AVAILABLE	AVAILABLE	AVAILABLE
		⋮	⋮	⋮	⋮
		16-24E	AVAILABLE	AVAILABLE	AVAILABLE
⋮	⋮	⋮	⋮	⋮	⋮
⋮	⋮	⋮	⋮	⋮	⋮
⋮	⋮	⋮	⋮	⋮	⋮
⋮	⋮	⋮	⋮	⋮	⋮
⋮	⋮	⋮	⋮	⋮	⋮

FIG. 9

RESERVATION USER TABLE

332

RESERVATION USER INFORMATION									
USER ID	RESERVA- TION NO.	RESERVA- TION DATE	TRAVEL DATE	TRAIN NO.	BOARDING STATION	DESTINATION STATION	DEPARTURE TIME	ARRIVAL TIME	SEAT NO.
003051	03256	20041115	20041203	NOZOMI 14	SHIN- OSAKA	TOKYO	12:53	15:26	06-08A
003051	03257	20041115	20041204	NOZOMI 35	TOKYO	SHIN- OSAKA	17:45	19:45	05-12C
590231	04521	20041121	20041206	HIKARI 12	KYOTO	TOKYO	12:50	15:10	07-01A
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

FIG. 10

TRAIN SERVICE SCHEDULE INFORMATION TABLE 333

TRAIN SERVICE SCHEDULE INFORMATION				
TRAIN NO.	DEPARTURE TIME (SHIN-OSAKA)	DEPARTURE TIME (KYOTO)	DEPARTURE TIME (NAGOYA)	ARRIVAL TIME (TOKYO)
NOZOMI 14	12:53	13:05	14:53	15:26
⋮ ⋮	⋮ ⋮	⋮ ⋮	⋮ ⋮	⋮ ⋮
NOZOMI 35	19:45	19:30	18:45	17:45
⋮ ⋮	⋮ ⋮	⋮ ⋮	⋮ ⋮	⋮ ⋮

FIG. 11

TRAIN SERVICE STATE INFORMATION TABLE 334

TRAIN SERVICE STATE INFORMATION				
SERVICE DATE	TRAIN NO.	SERVICE STATE	DELAY TIME	CAUSE
20041203	NOZOMI 14	DELAYED	30 MIN	TYPHOON
20041203	NOZOMI 15	NORMAL SERVICE	—	—
20041203	NOZOMI 16	CANCELLED	—	EARTHQUAKE
20041203	NOZOMI 17	DELAYED	UNKNOWN	ACCIDENT
20041203	NOZOMI 18	NORMAL SERVICE	—	—
20041203	NOZOMI 19	DELAYED	AT LEAST TWO HOURS	UNKNOWN
· · ·	· · ·	· · ·	· · ·	· · ·

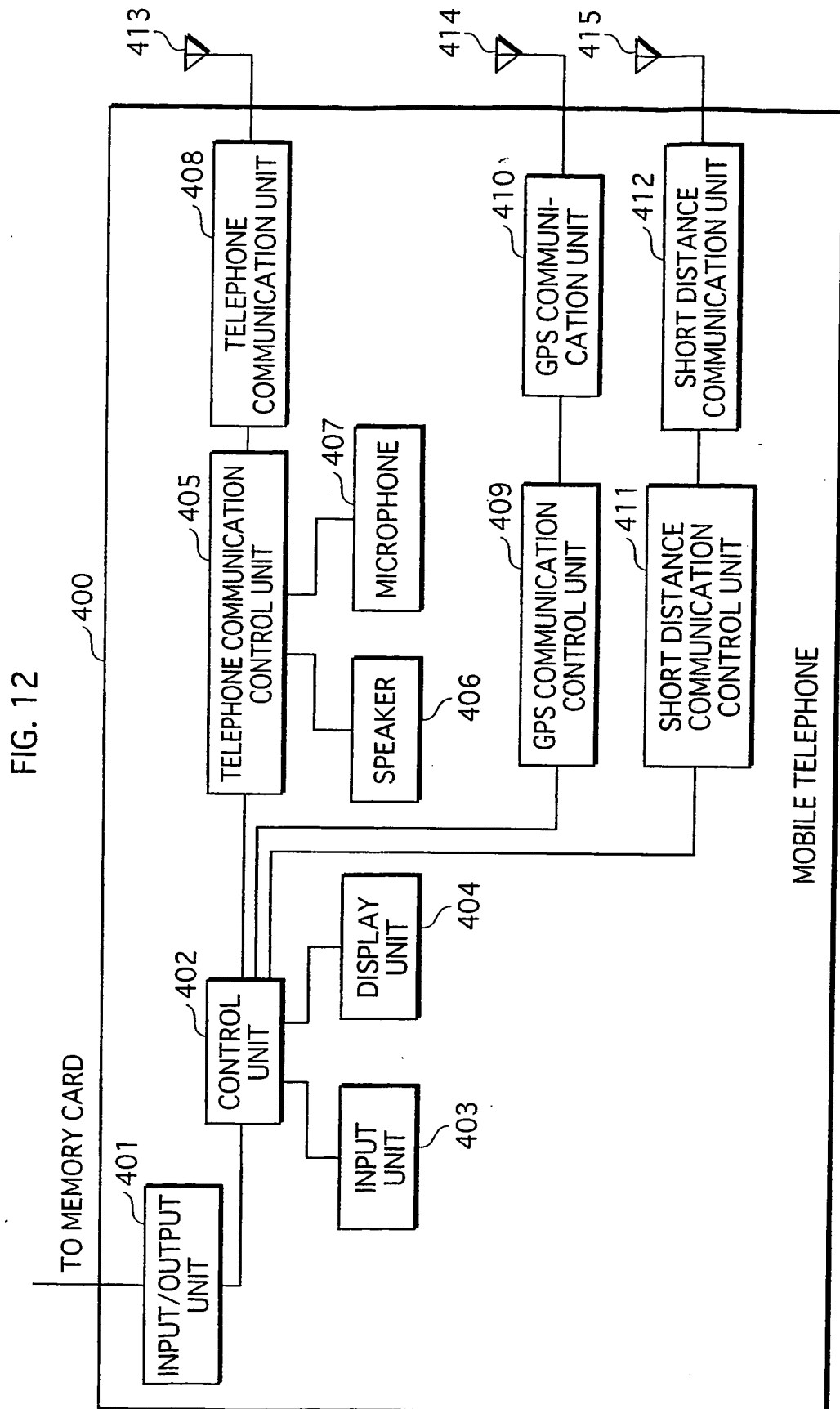
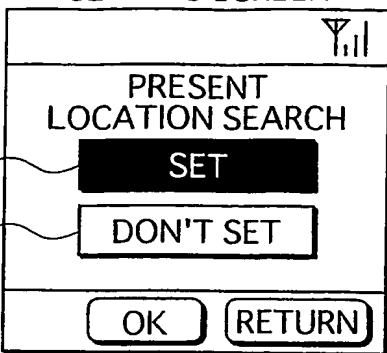


FIG.13
SETTING SCREEN



431

PRESENT
LOCATION SEARCH

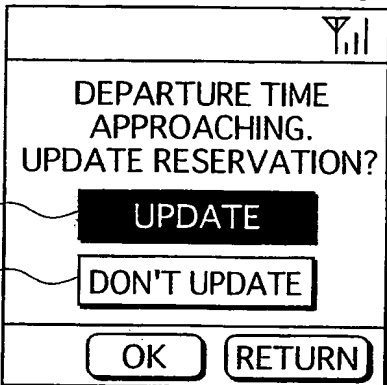
431a SET

431b DON'T SET

OK RETURN

Detailed description: This is a screenshot of a 'SETTING SCREEN' on a handheld device. At the top right is a signal strength indicator. The main title is 'PRESENT LOCATION SEARCH'. Below it are two buttons: 'SET' (labeled 431a) and 'DON'T SET' (labeled 431b). At the bottom are 'OK' and 'RETURN' buttons.

UPDATE CONFIRMATION SCREEN



432

DEPARTURE TIME
APPROACHING.
UPDATE RESERVATION?

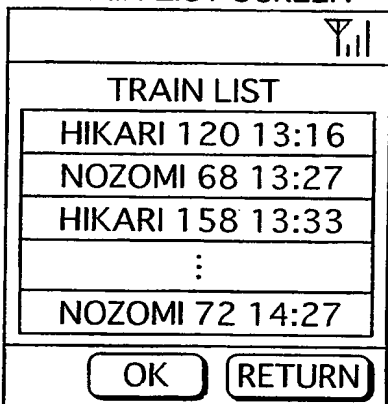
432a UPDATE

432b DON'T UPDATE

OK RETURN

Detailed description: This is a screenshot of an 'UPDATE CONFIRMATION SCREEN'. At the top right is a signal strength indicator. The main text asks 'DEPARTURE TIME APPROACHING. UPDATE RESERVATION?'. Below it are two buttons: 'UPDATE' (labeled 432a) and 'DON'T UPDATE' (labeled 432b). At the bottom are 'OK' and 'RETURN' buttons.

TRAIN LIST SCREEN



433

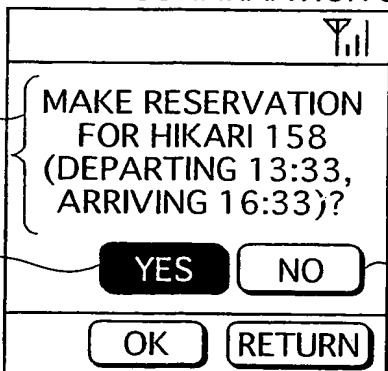
TRAIN LIST

HIKARI 120 13:16
NOZOMI 68 13:27
HIKARI 158 13:33
⋮
NOZOMI 72 14:27

OK RETURN

Detailed description: This is a screenshot of a 'TRAIN LIST SCREEN'. At the top right is a signal strength indicator. The title is 'TRAIN LIST'. Below it is a list of train entries, each in a separate box: 'HIKARI 120 13:16', 'NOZOMI 68 13:27', 'HIKARI 158 13:33', a vertical ellipsis '⋮', and 'NOZOMI 72 14:27'. At the bottom are 'OK' and 'RETURN' buttons.

RESERVATION CONFIRMATION SCREEN



434

434a { MAKE RESERVATION
FOR HIKARI 158
(DEPARTING 13:33,
ARRIVING 16:33)?

434b YES

434c NO

OK RETURN

Detailed description: This is a screenshot of a 'RESERVATION CONFIRMATION SCREEN'. At the top right is a signal strength indicator. The main text asks 'MAKE RESERVATION FOR HIKARI 158 (DEPARTING 13:33, ARRIVING 16:33)?'. This text is enclosed in a large left-facing curly brace, which is labeled 434a. Below the text are two buttons: 'YES' (labeled 434b) and 'NO' (labeled 434c). At the bottom are 'OK' and 'RETURN' buttons.

FIG. 14

RESERVATION CHANGE SCREEN

435

NOZOMI 14
(DEPARTING 12:52,
ARRIVING 15:26)
CANCELLED. CHANGE
RESERVATION?

435a

CONFIRMED

OK RETURN

Detailed description: This is a screenshot of a mobile phone screen titled 'RESERVATION CHANGE SCREEN'. The screen is labeled 435. It displays the train name 'NOZOMI 14' and its schedule '(DEPARTING 12:52, ARRIVING 15:26)'. Below this, it says 'CANCELLED. CHANGE RESERVATION?'. There is a button labeled 'CONFIRMED' (pointed to by 435a) and two buttons at the bottom: 'OK' and 'RETURN'.

RESERVATION CHANGE
CONFIRMATION SCREEN

436

436a

NOZOMI 14
(DEPARTING 12:52,
ARRIVING 15:26)
30 MIN DELAY
EXPECTED.
CHANGE
RESERVATION?

436b

436c

CHANGE DON'T CHANGE

OK RETURN

Detailed description: This is a screenshot of a mobile phone screen titled 'RESERVATION CHANGE CONFIRMATION SCREEN'. The screen is labeled 436. It displays the train name 'NOZOMI 14' and its schedule '(DEPARTING 12:52, ARRIVING 15:26)'. Below this, it says '30 MIN DELAY EXPECTED. CHANGE RESERVATION?'. There are two buttons labeled 'CHANGE' (pointed to by 436b) and 'DON'T CHANGE' (pointed to by 436c). At the bottom, there are two buttons: 'OK' and 'RETURN'. A bracket on the left side of the text area is labeled 436a.

FIG. 15

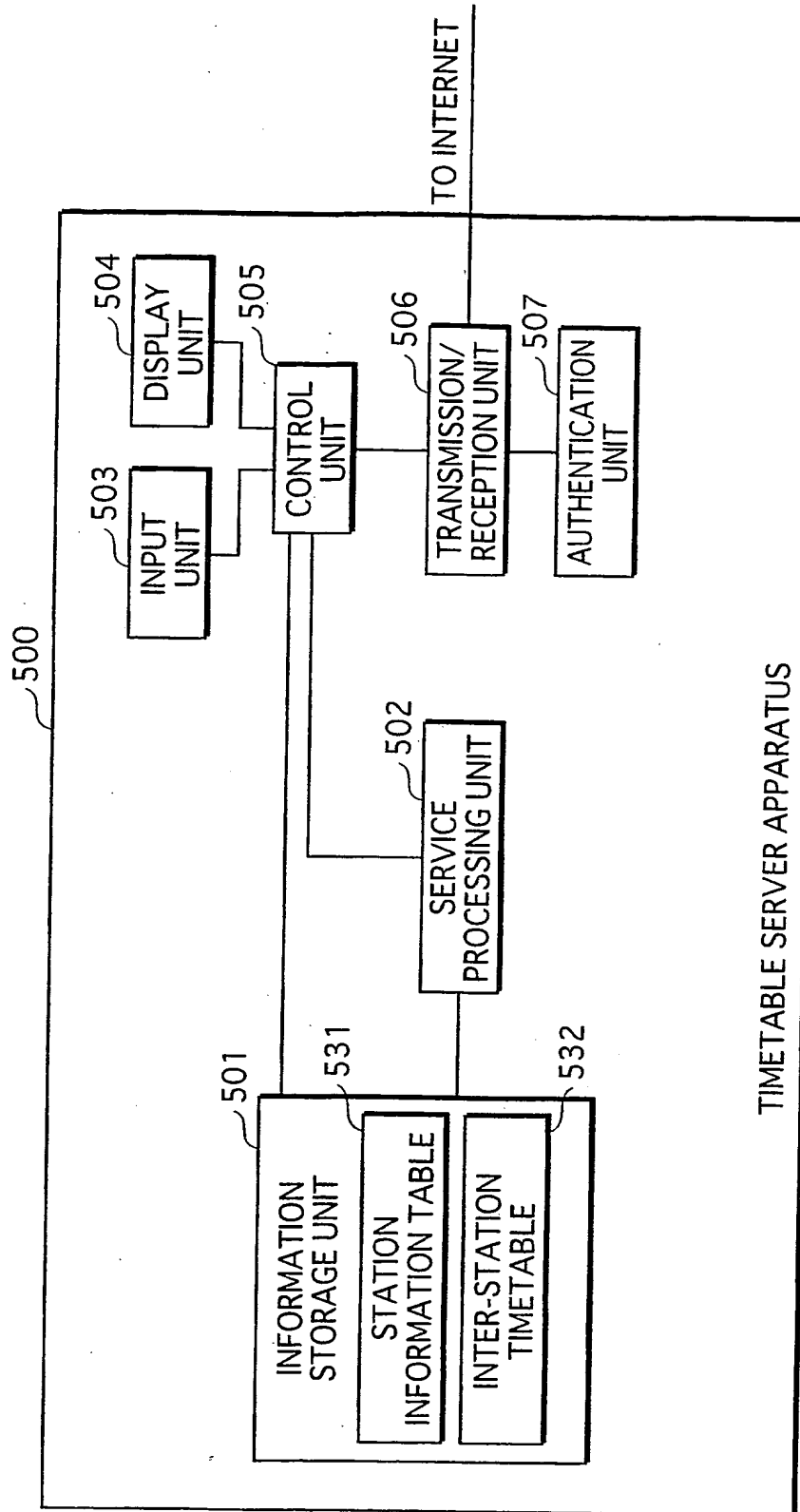


FIG. 16

STATION INFORMATION TABLE 531

STATION INFORMATION				
STATION CODE	STATION NAME	ADDRESS	LOCATION INFORMATION	
			LONGITUDE	LATITUDE
0123	TOKYO	XXXX, TOKYO	139° 42"15'E	35° 41"16'N
0235	SHIN-OSAKA	XXXX, OSAKA	135° 30"50'E	34° 40"32'N
.
.
.

FIG. 17

INTER-STATION TIMETABLE

532

	TOKYO	YURAKUCHO	SHINBASHI	HAMAMATSU-CHO	TAMACHI	SHINAGAWA	...
TOKYO		1 MIN	2 MIN	3 MIN	4 MIN	5 MIN	...
YURAKUCHO	—		1 MIN	2 MIN	3 MIN	4 MIN	...
SHINBASHI	—	—		1 MIN	3 MIN	4 MIN	...
HAMAMATSU-CHO	—	—	—		1 MIN	2 MIN	...
TAMACHI	—	—	—	—		1 MIN	...
SHINAGAWA	—	—	—	—	—		...
⋮	⋮	⋮	⋮	⋮	⋮	⋮	

FIG. 18

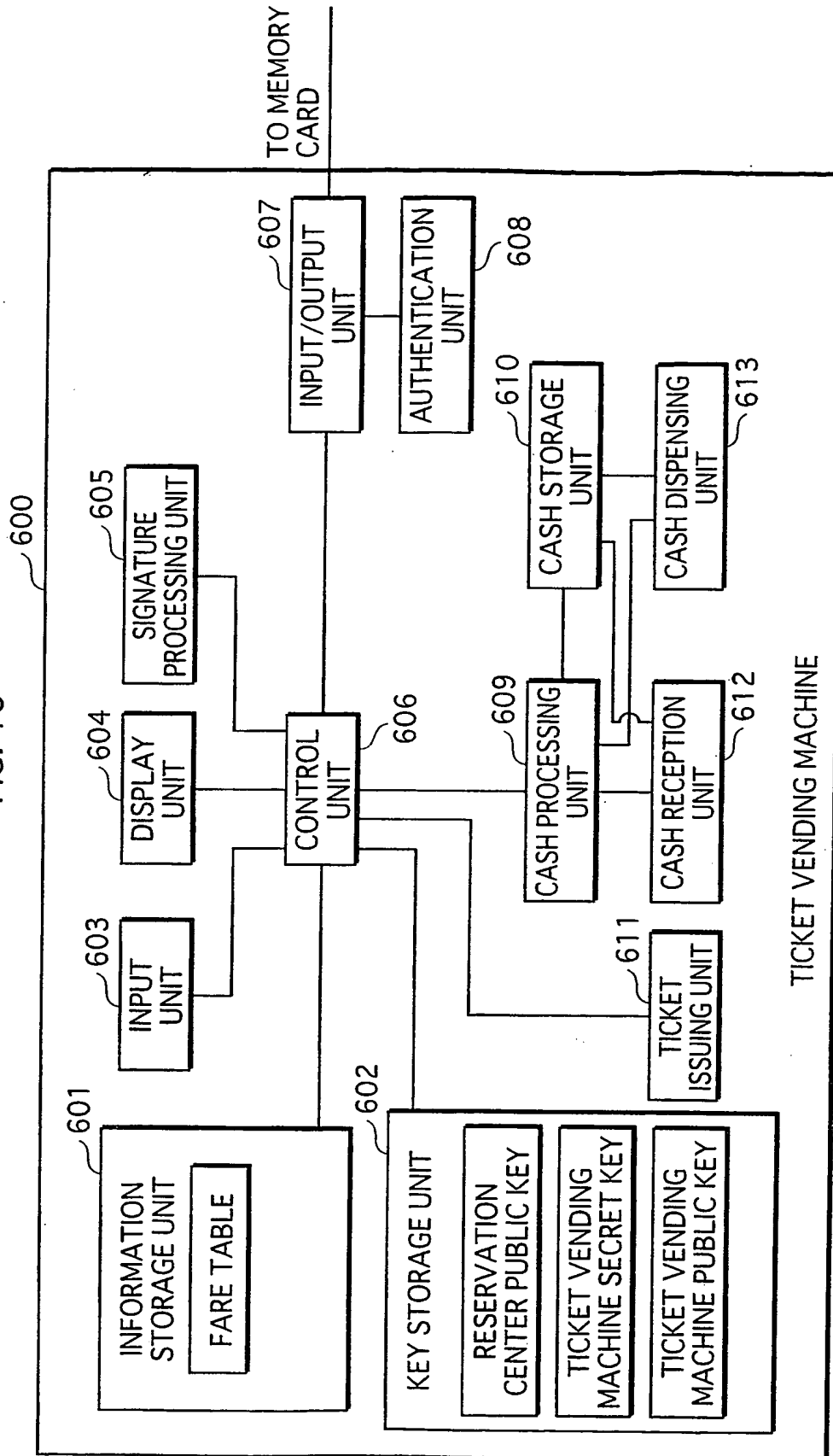


FIG. 19

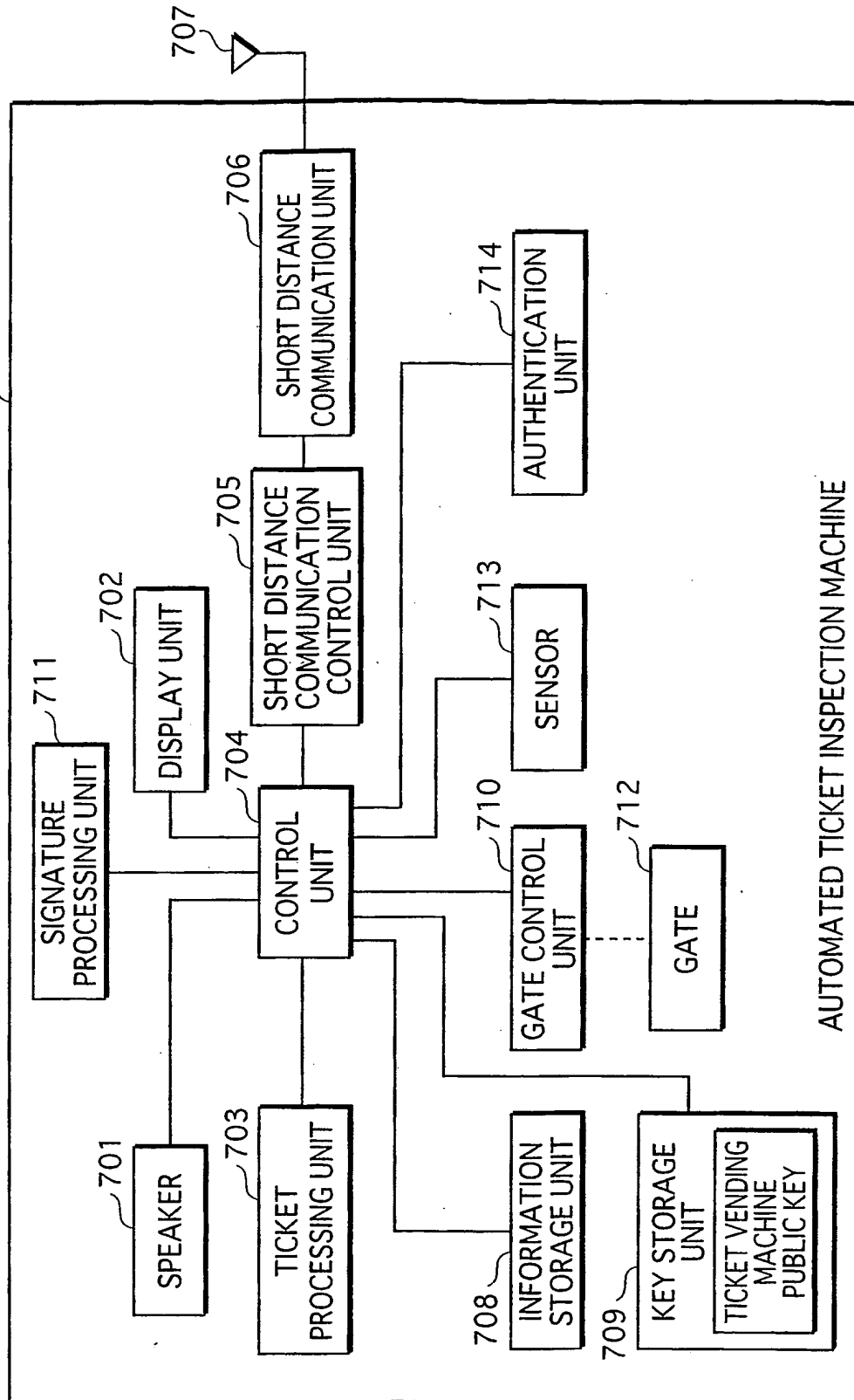


FIG.20

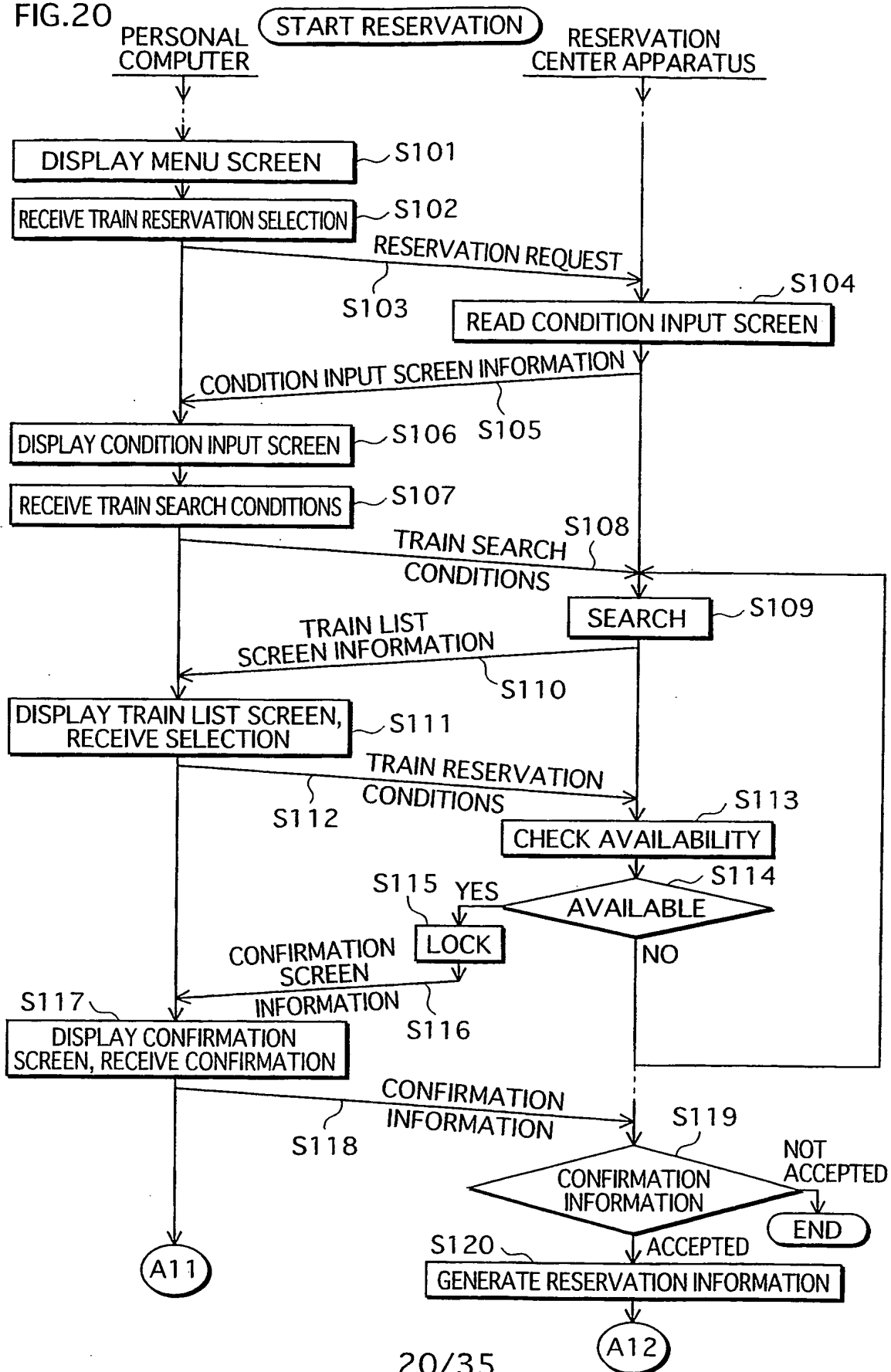


FIG.21

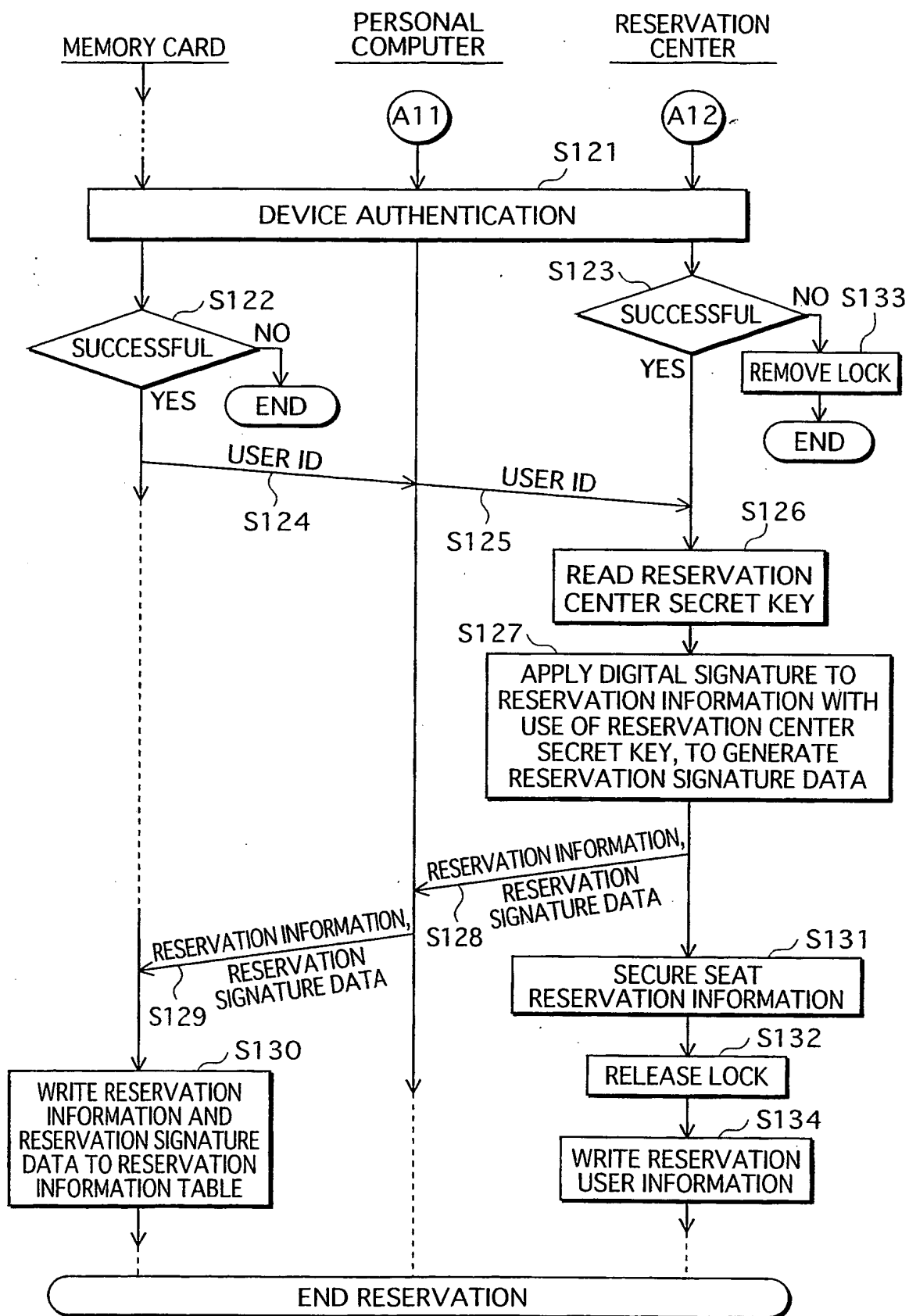


FIG.22

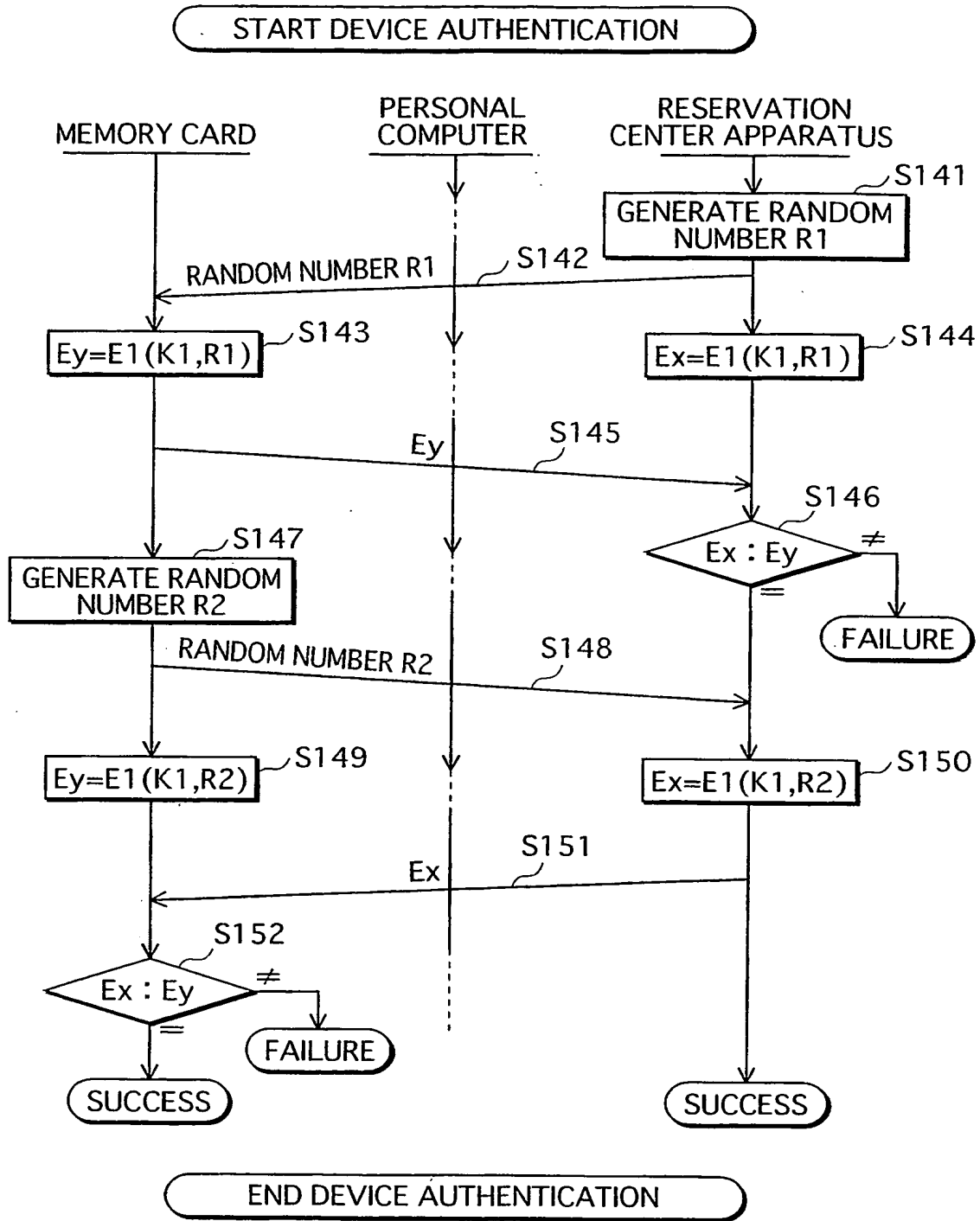


FIG.23

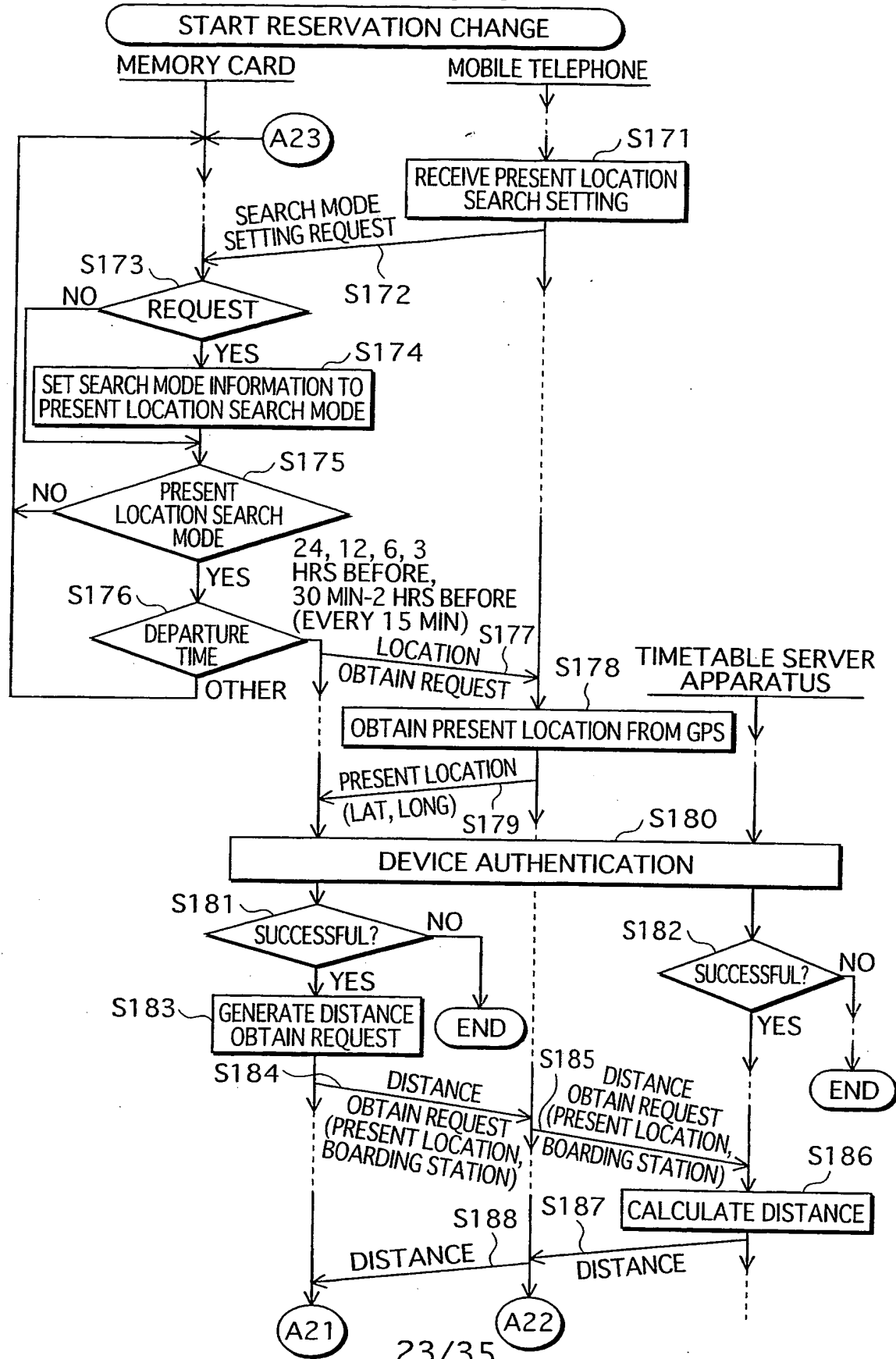


FIG. 24

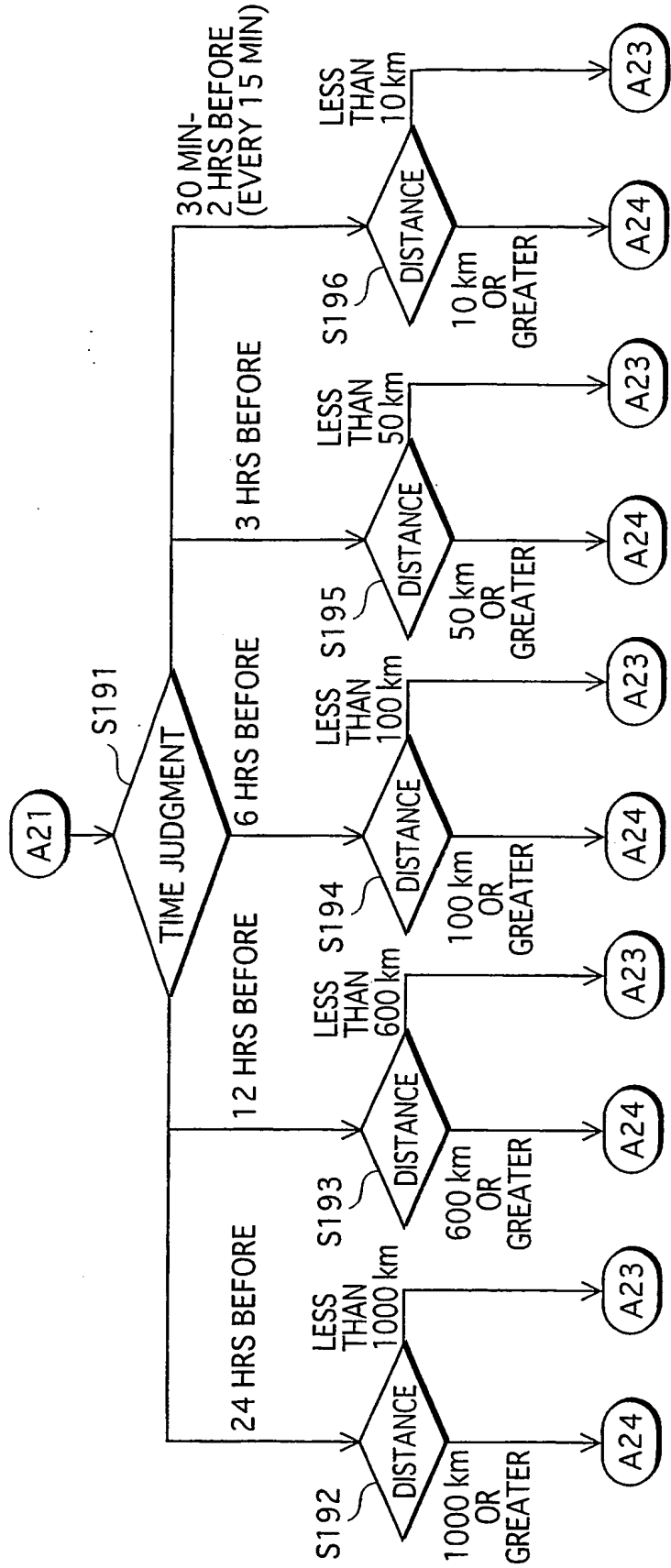


FIG.25

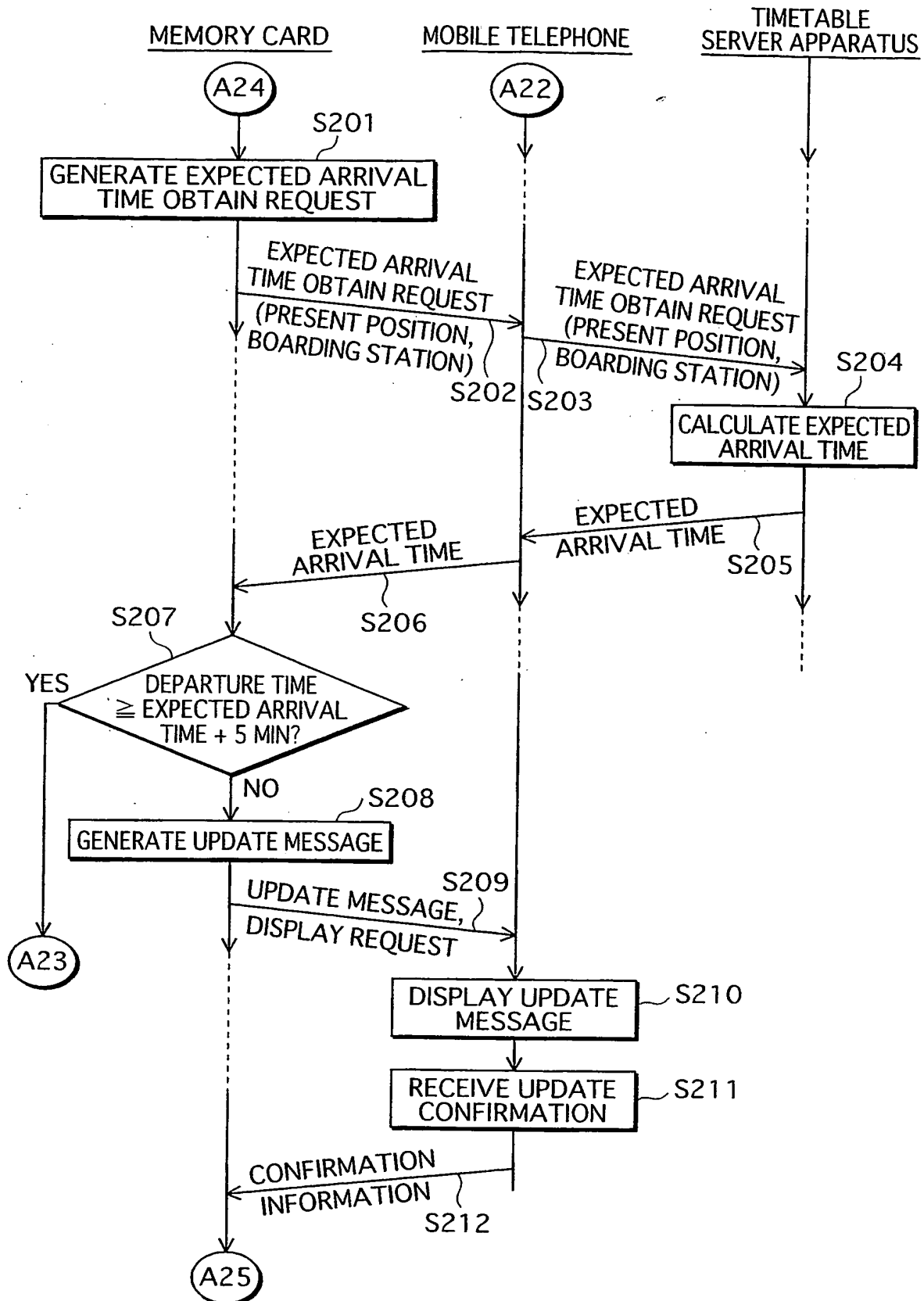


FIG.26

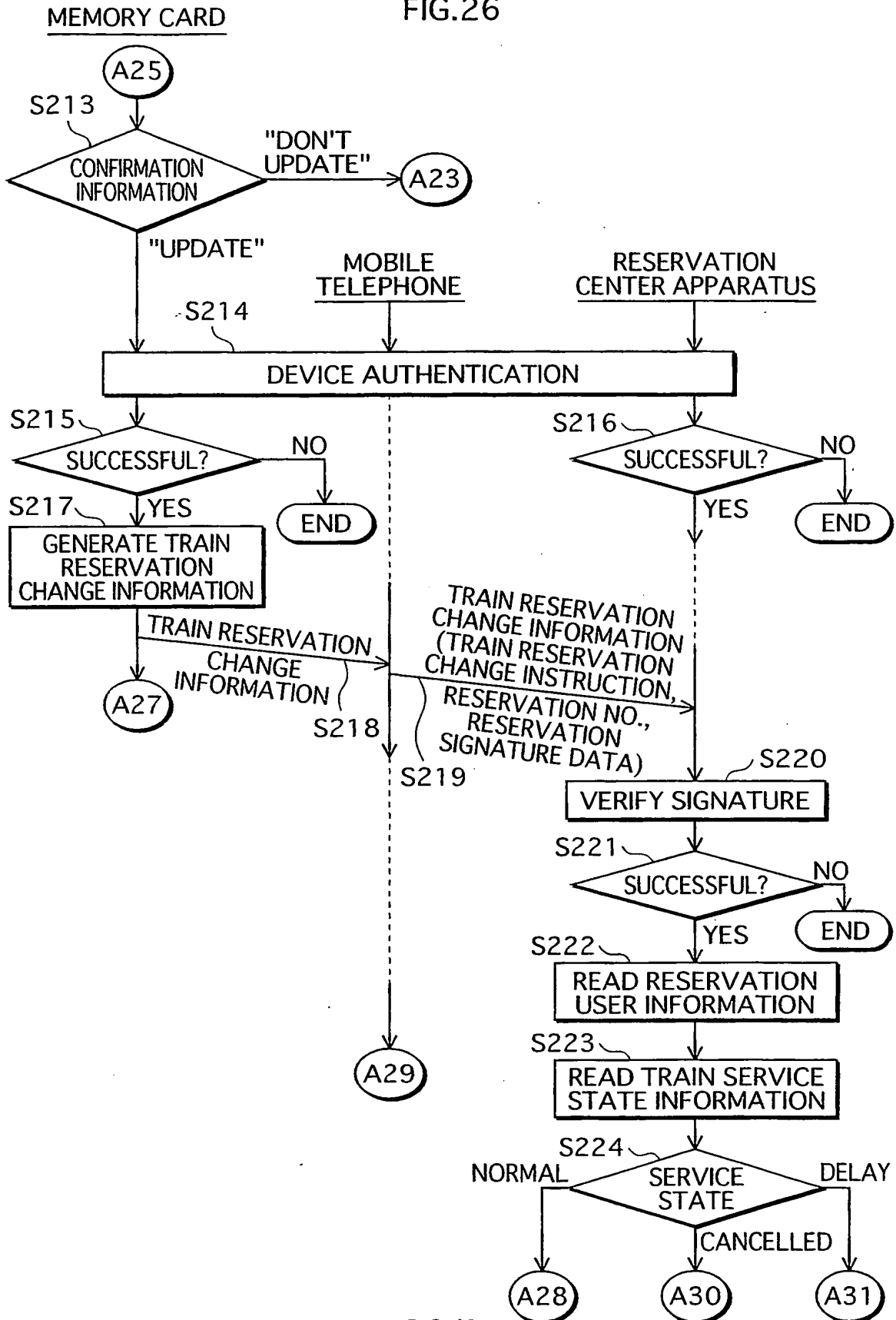


FIG.27

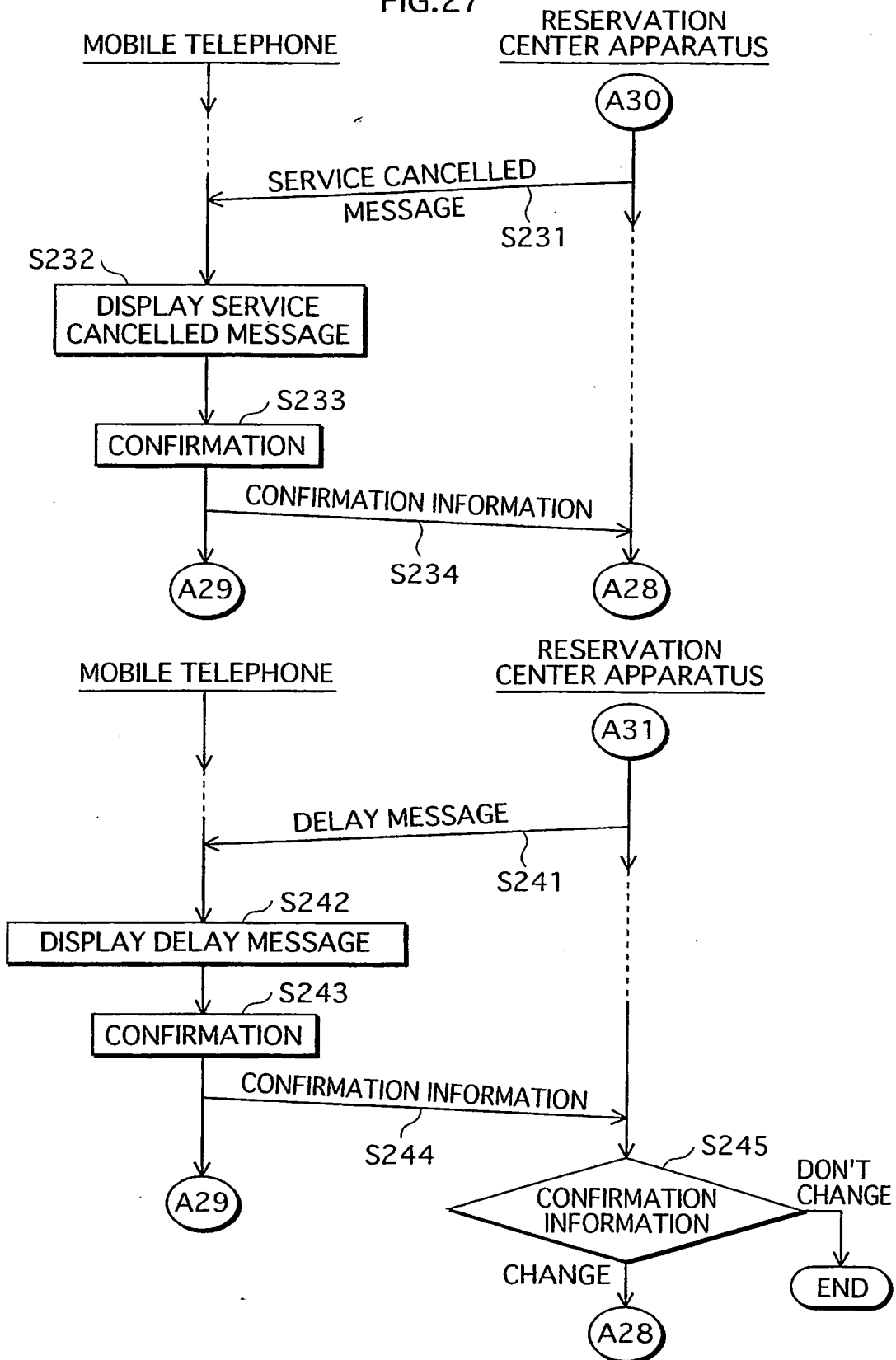


FIG.28

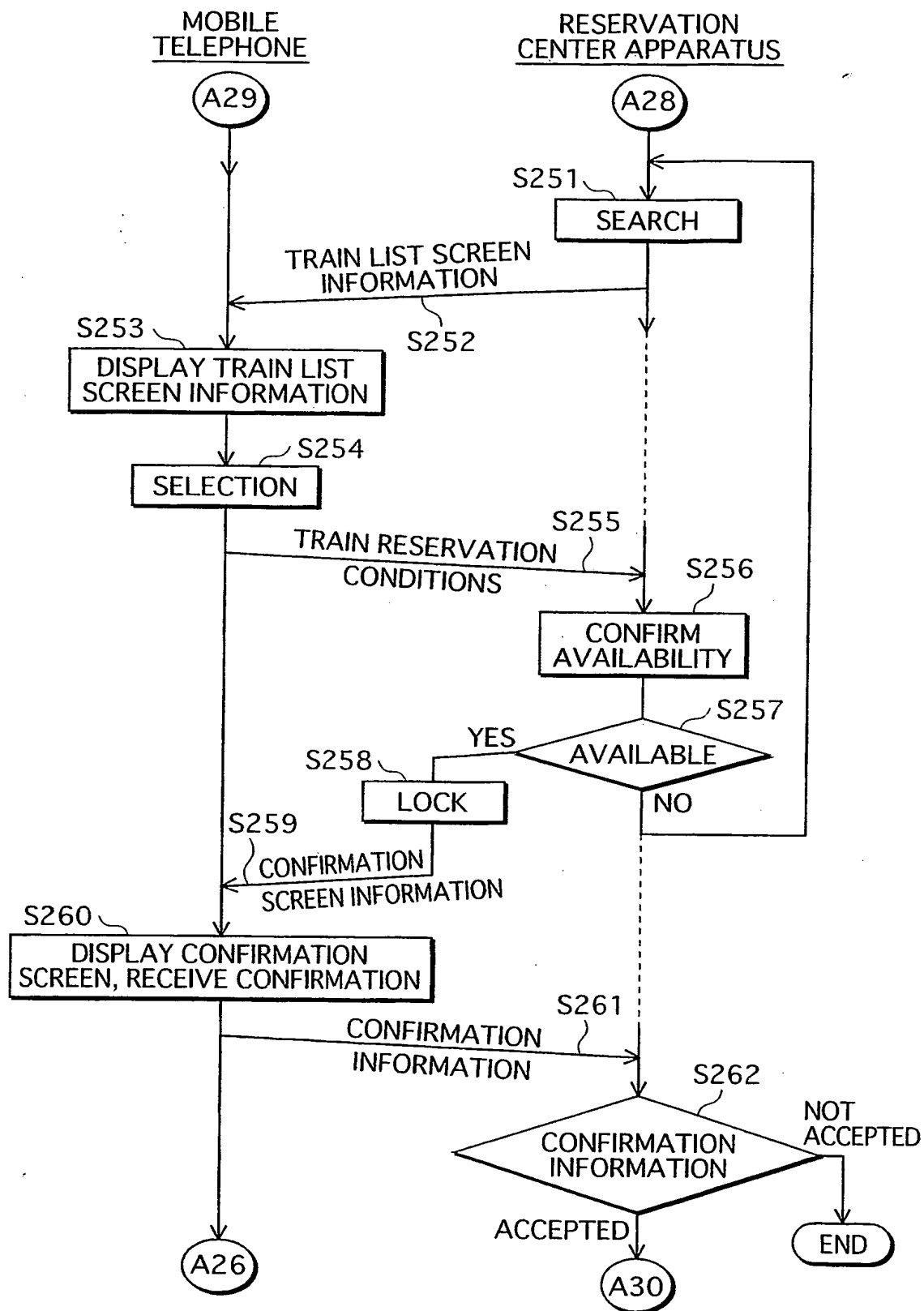


FIG.29

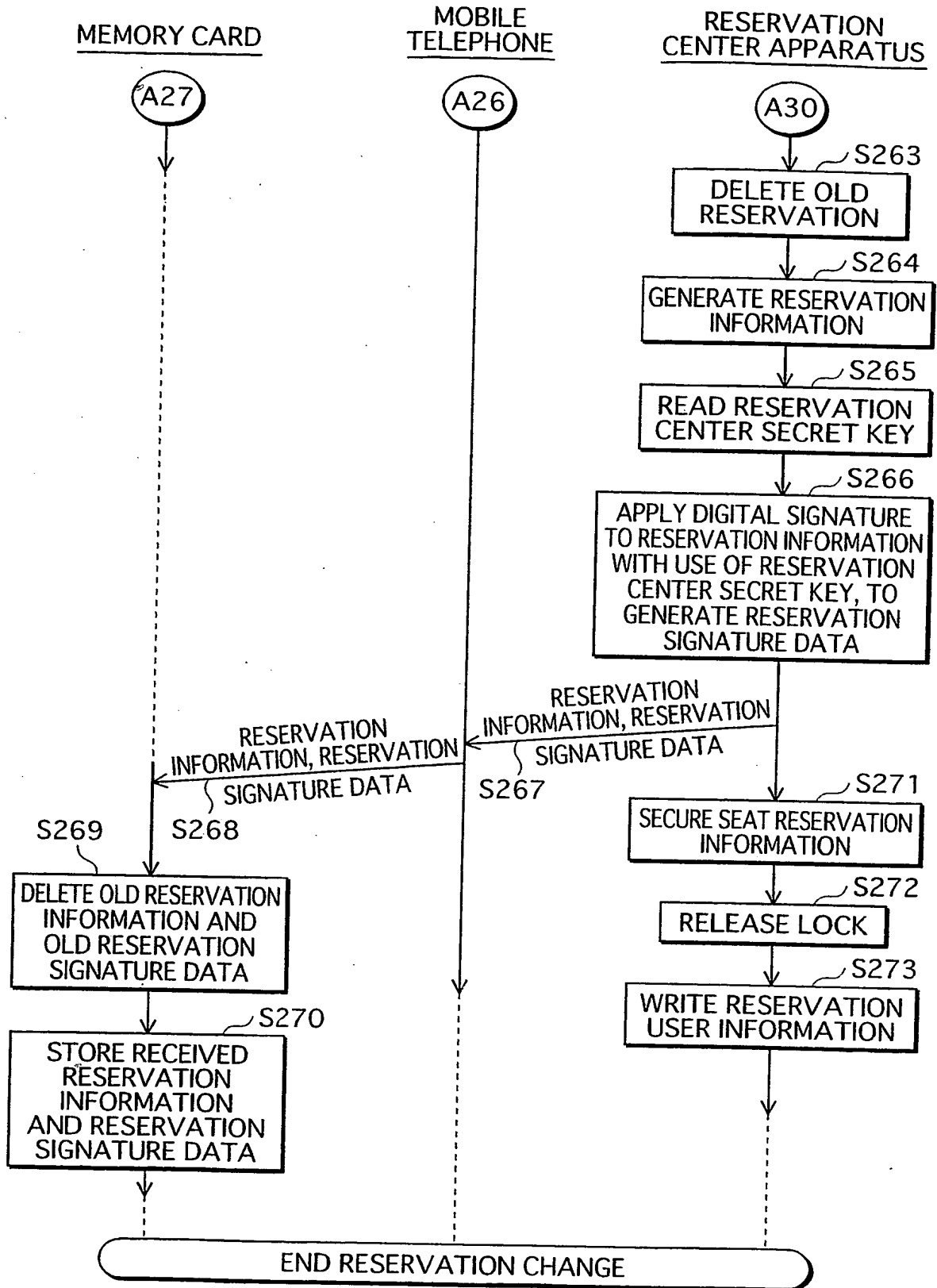


FIG.30

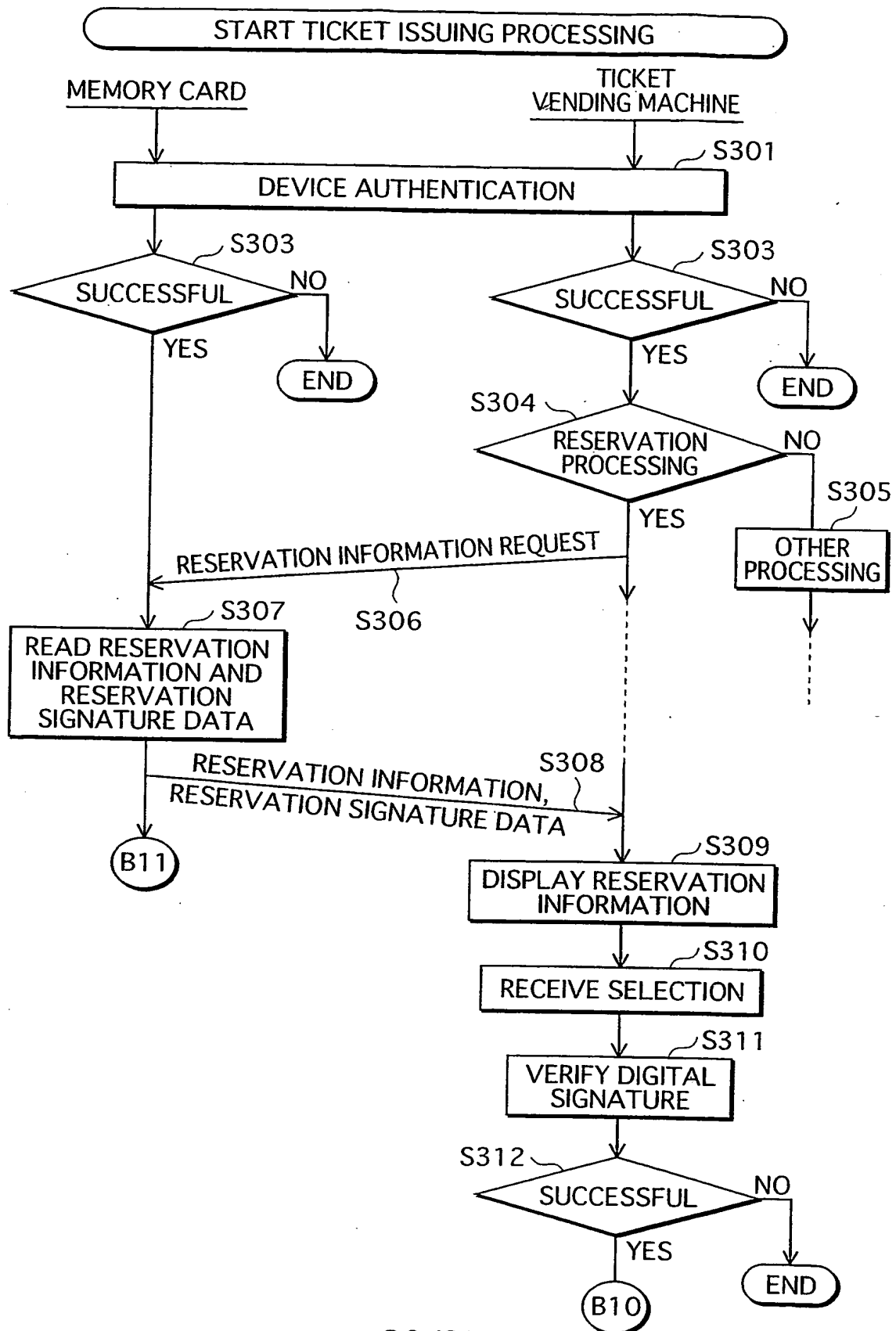


FIG.31

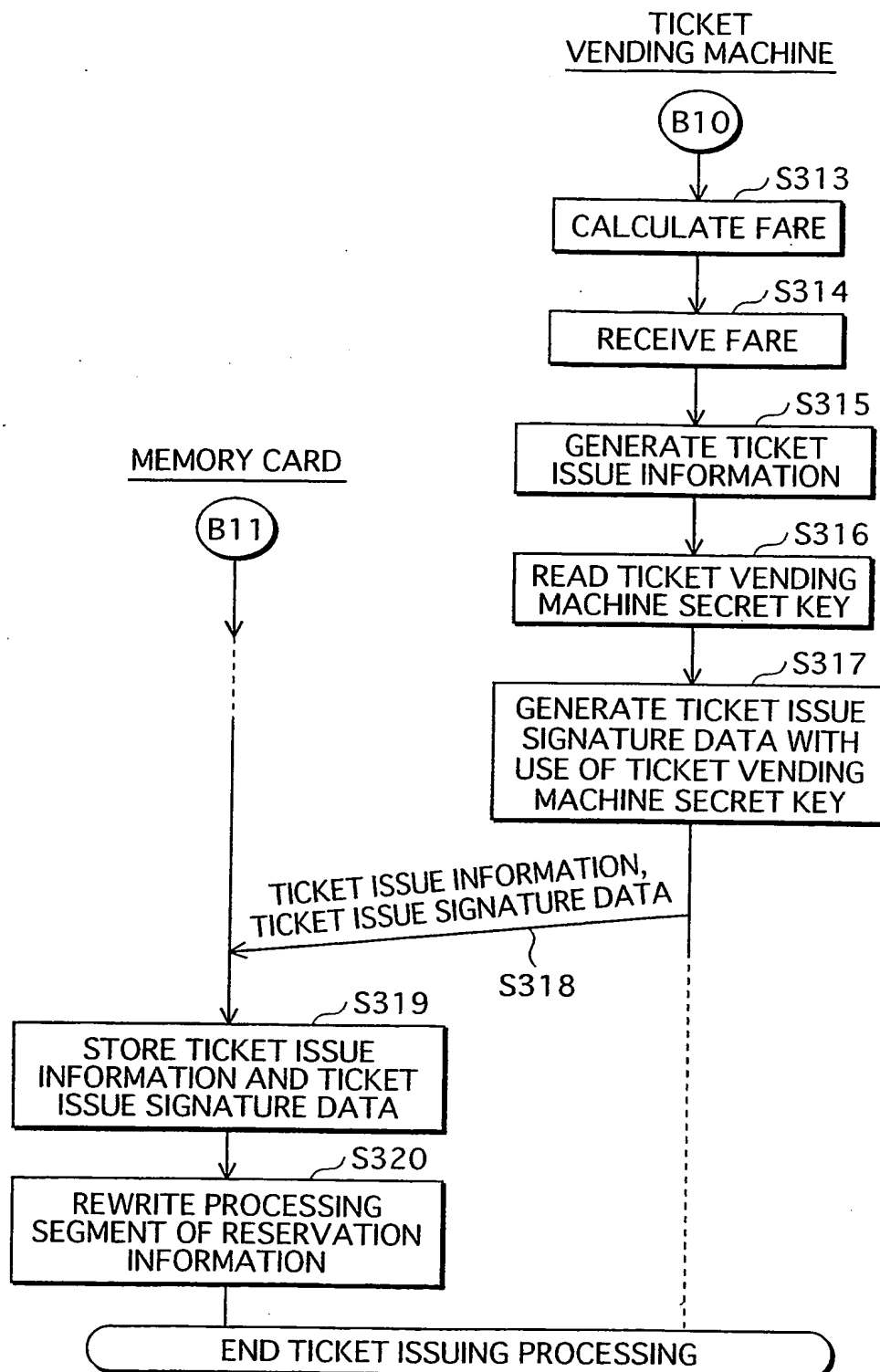


FIG.32

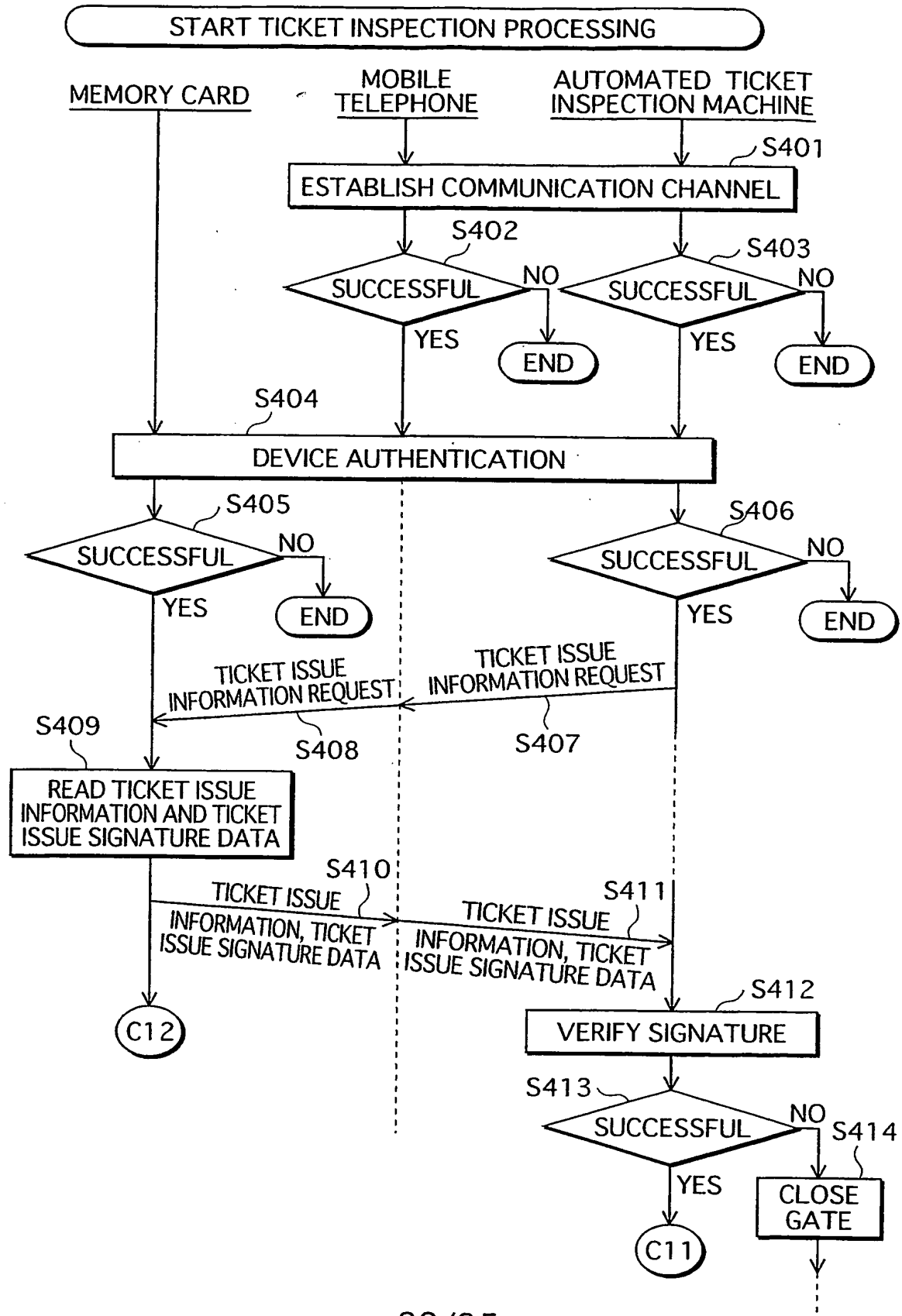


FIG.33

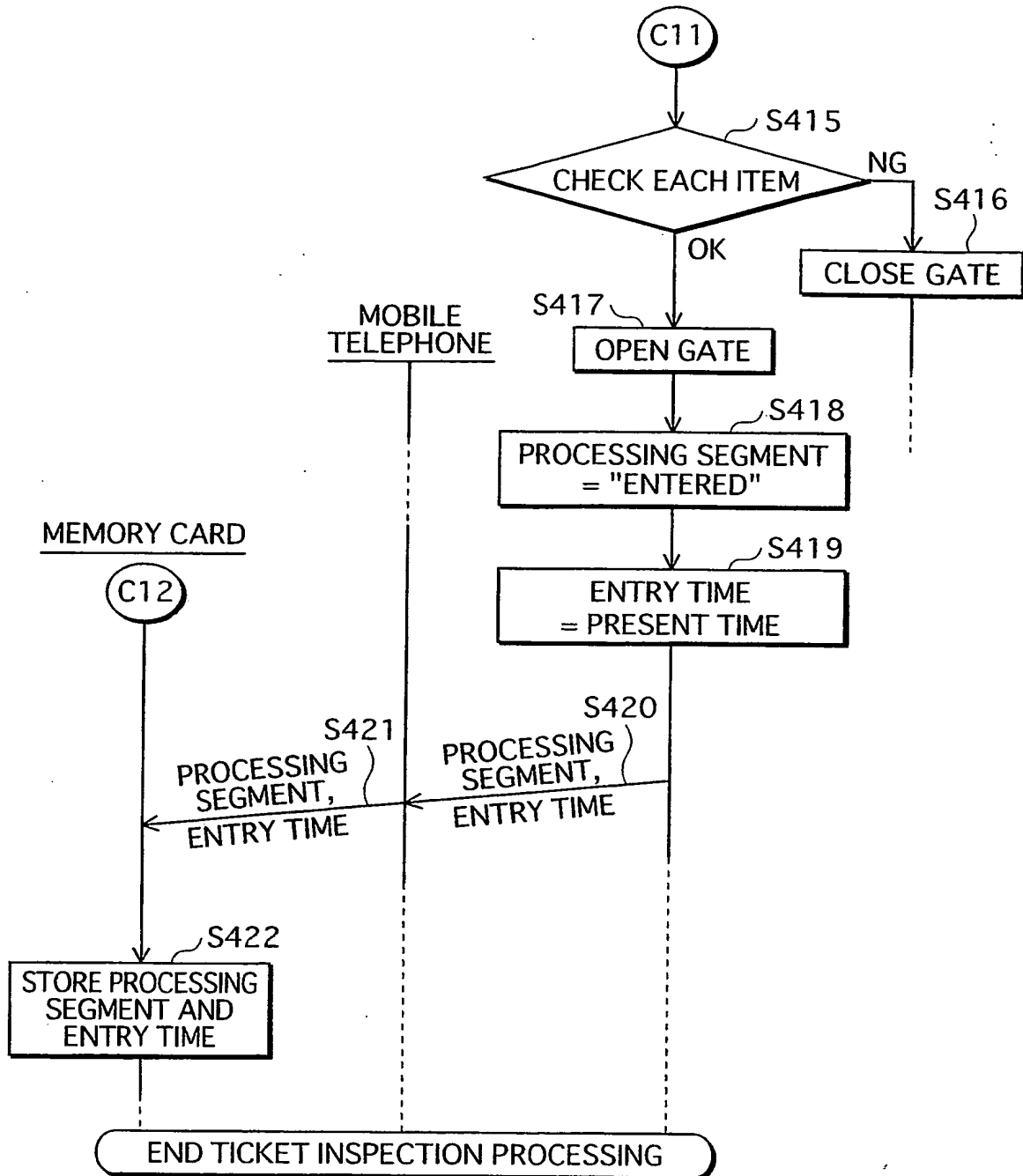


FIG. 34

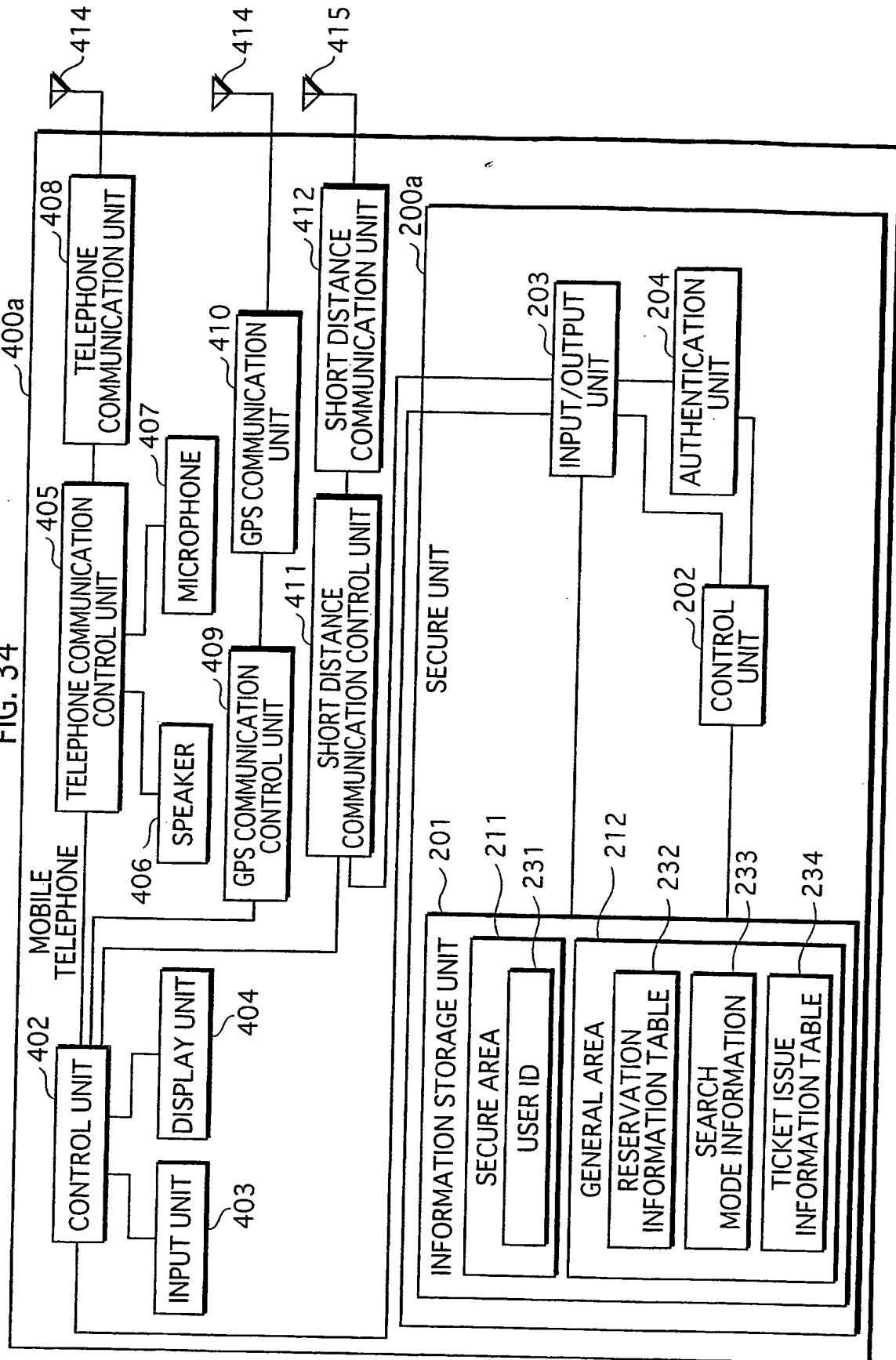
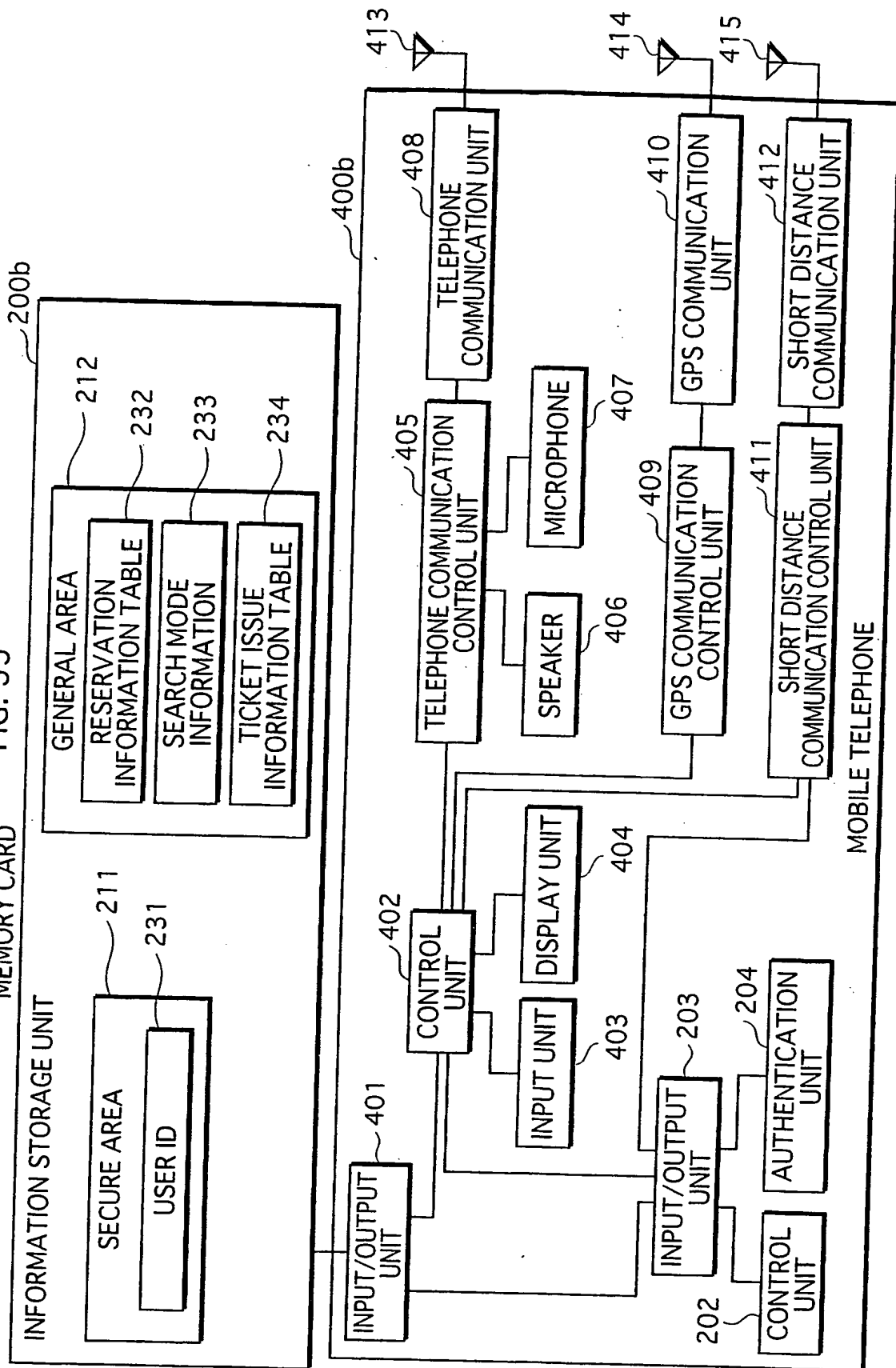


FIG. 35

MEMORY CARD



INTERNATIONAL SEARCH REPORT

Int ional Application No
PC1/JP2004/011295

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G06F17/60

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>EP 0 950 968 A (MATSUSHITA ELECTRIC IND CO LTD) 20 October 1999 (1999-10-20) abstract page 3, column 4, paragraph 33 - page 4, column 5, paragraph 36 page 5, column 7, lines 3-11 - page 6, columns 9,10, paragraph 71-76 page 7, columns 11,12, paragraph 92 pages 10,11, columns 18,19, paragraph 126 page 13, column 24, paragraphs 167,171 - page 22, column 41, paragraph 287 page 35, columns 67,68, paragraph 337 - page 53, column 104, paragraph 564</p> <p style="text-align: center;">-/--</p>	1-24

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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- *8* document member of the same patent family

Date of the actual completion of the international search

16 December 2004

Date of mailing of the international search report

04/01/2005

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INTERNATIONAL SEARCH REPORT

Int'l Application No
PCT/JP2004/011295

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2001/054010 A1 (WEED STEPHEN J. ET AL) 20 December 2001 (2001-12-20) abstract page 2, paragraphs 14,22,23,25 - page 3, paragraph 28 page 4, paragraphs 32,36 -----	1-24
X	US 2003/065528 A1 (MATSUMOTO KOZO) 3 April 2003 (2003-04-03) abstract page 1, column 2, paragraphs 13,14 - page 2, column 2, paragraphs 20,21,23,24 page 3, column 1, paragraph 25 -----	1-24

INTERNATIONAL SEARCH REPORT

Information on patent family members

Int. l. Application No

PCT/JP2004/011295

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			AU 8648498 A	08-03-1999
			EP 0950968 A1	20-10-1999
			CN 1246941 T	08-03-2000
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			TW 565804 B	11-12-2003